I CLAIM:

1. A method for diagnosing a cancer in a mammal, comprising:

    a) determining PKN gene copy number in a test sample from a region of the mammal that is suspected to be precancerous or cancerous, thereby generating data for a test gene copy number; and

    b) comparing the test gene copy number to data for a control gene copy number, wherein an amplification of the gene in the test sample relative to the control indicates the presence of a precancerous lesion or a cancer in the mammal.

2. The method according to claim 1, wherein the cancer is a breast cancer, a colon cancer, an esophagus cancer, a bladder cancer, a brain cancer, a head and neck cancer, a kidney cancer, a liver cancer, a lymphoma cancer, a melanoma cancer, a pancreatic cancer, a lung cancer, an ovarian cancer, or a stomach cancer.

3. A method for inhibiting cancer or precancerous growth in a mammalian tissue, comprising contacting the tissue with an inhibitor that interacts with PKN DNA or RNA and thereby inhibits PKN gene function.

4. The method according to claim 3, wherein the tissue is a breast tissue, a colon tissue, an esophageal tissue, a bladder tissue, a brain tissue, a head and neck tissue, a kidney tissue, a liver tissue, a lymphoma tissue, a melanoma tissue, a pancreatic tissue, a lung tissue, an ovarian tissue, or a stomach tissue.

5. The method according to claim 3, wherein the inhibitor is a siRNA, miRNA, an antisense RNA, an antisense DNA, a decoy molecule, or a decoy DNA.

6. The method according to claim 3, wherein the inhibitor contains nucleotides, and wherein the inhibitor comprises less than about 100 bps in length.

7. The method according to claim 3, wherein the inhibitor is a ribozyme.

8. The method according to claim 3, wherein the inhibitor is a small molecule.

9. A method for inhibiting cancer or precancerous growth in a mammalian tissue, comprising contacting the tissue with an inhibitor of PKN protein.

10. The method according to claim 9, wherein the tissue is a breast tissue, a colon tissue, an esophageal tissue, a bladder tissue, a brain tissue, a head and neck tissue, a kidney tissue, a liver tissue, a lymphoma tissue, a melanoma tissue, a pancreatic tissue, a lung tissue, an ovarian tissue, a prostate tissue, or a stomach tissue.

11. A method for diagnosing a cancer in a mammal, comprising:

    a) determining the level of PKN in a test sample from a region of the mammal that is suspected to be precancerous or cancerous, thereby generating data for a test level; and

    b) comparing the test level to data for a control level, wherein an elevated test level of the test sample relative to the control level indicates the presence of a precancerous lesion or a cancer in the mammal.

12. The method according to claim 11, wherein the control level is obtained from a database of PKN levels detected in a control sample.

13. A method of blocking *in vivo* expression of a gene by administering a vector encoding PKN siRNA.

14. The method of claim 13, wherein the siRNA interferes with PKN activity.

15. The method of claim 13, wherein the siRNA causes post-transcriptional silencing of PKN gene in a mammalian cell.

16. The method of claim 15, wherein the cell is a human cell.

17. A method of screening a test molecule for PKN antagonist activity comprising the steps of:

    a) contacting the molecule with a cancer cell;

    b) determining the level of PKN in the cell, thereby generating data for a test level; and

c) comparing the test level to the PKN level of the cancer cell prior to contacting the test molecule, wherein a decrease in PKN in the test level indicates PKN antagonist activity of the test molecule.

18. The method of claim 17, wherein the level of PKN is determined by reverse transcription and polymerase chain reaction (RT-PCR).

19. The method of claim 17, wherein the level of PKN is determined by Northern hybridization or microarray analysis.

20. The method of claim 17, wherein the cell is obtained from a breast tissue, a colon tissue, an esophageal tissue, a bladder tissue, a brain tissue, a head and neck tissue, a kidney tissue, a liver tissue, a lymphoma tissue, a melanoma tissue, a pancreatic tissue, a lung tissue, an ovarian tissue, a prostate tissue, or a stomach tissue.

21. A method of screening a test molecule for PKN antagonist activity comprising the steps of:

a) contacting the molecule with PKN; and

b) determining the effect of the test molecule on PKN.

22. The method according to claim 21, wherein the effect is determined via a binding assay.

23. A method of determining whether a test molecule has PKN antagonist activity, wherein the method comprises:

a) determining the level of PKN in a test sample containing cancer cells, thereby generating data for a control level;

b) contacting the molecule with the test sample to generate data for a test level; and

c) comparing the control level to the test level, wherein no decrease in PKN in the test level as compared to the control level indicates that the test molecule has no PKN antagonist activity.

24. A method for selecting test molecules having PKN antagonist activity, wherein the method comprises:

a) determining the level of PKN in a test sample containing cancer cells, thereby generating data for a control level;

b) contacting the molecule with the test sample to generate data for a test level;

c) comparing the control level to test level, wherein no decrease in PKN in the test level as compared to the control level indicates that the test molecule has no PKN antagonist activity; and

d) eliminating the test molecule from further evaluation or study.

25. A method for determining the efficacy of a therapeutic treatment regimen in a patient, comprising:

a) measuring the PKN gene copy number in a first sample obtained from a patient, thereby generating an initial level;

b) administering the treatment regimen to the patient;

c) measuring the PKN gene copy number in a second sample from the patient at a time following administration of the treatment regimen, thereby generating a test level; and

d) comparing the initial and test levels, wherein a decrease in the gene copy number level in the test level relative to the initial level indicates that the treatment regimen is effective in the patient.

26. The method according to claim 25, wherein the sample is obtained from a breast tissue, a colon tissue, an esophageal tissue, a bladder tissue, a brain tissue, a head and neck tissue, a kidney tissue, a liver tissue, a lymphoma tissue, a melanoma tissue, a pancreatic tissue, a lung tissue, an ovarian tissue, or a stomach tissue.

27. A method for determining the efficacy of a therapeutic treatment regimen in a patient, comprising:

a) measuring at least one of PKN mRNA or PKN expression levels in a first sample obtained from the patient, thereby generating data for a pre-treatment level;

b) administering the treatment regimen to the patient;

c) measuring at least one of PKN mRNA or PKN expression levels in a second sample from the patient at a time following administration of the treatment regimen, thereby generating data for a test level; and

d) comparing the pre-treatment level to the test level, wherein data showing no decrease in the test level relative to the pre-treatment level indicates that the treatment regimen is not effective in the patient.

28. A method for selecting test molecules having a therapeutic effect in a patient, comprising:

a) measuring at least one of PKN mRNA or PKN expression levels in a first sample obtained from the patient, thereby generating data for a pre-treatment level;

b) administering the test molecule to the patient;

c) measuring at least one of PKN mRNA or PKN expression levels in a second sample from the patient at a time following administration of the test molecule, thereby generating data for a test level;

d) comparing the pre-treatment level to the test level, wherein data showing no decrease in the test level relative to the pre-treatment level indicates that the test molecule is not effective in the patient; and

e) eliminating the test molecule from further evaluation or study.

29. A method for validating potency of a therapeutic compound, wherein the method comprises:

a) measuring PKN mRNA transcript levels in a first sample of cells, thereby generating data for a pre-treatment level;

b) contacting the cells with the compound;

c) measuring PKN mRNA transcript levels in a second sample from the cells at a time following contacting the compound, thereby generating data for a test level; and

comparing the pre-treatment level to the test level, wherein a decrease in the test level relative to the pre-treatment level indicates that the compound is effective.

30. The method according to claim 29, wherein the cells are a cell line comprise an PKN amplicon.

31. A method for validating potency of a therapeutic compound, wherein the method comprises:

a) culturing a cell line comprising PKN amplicon in a suitable growth media;

b) contacting the cell line with the compound; and

examining the culture for cell death or suppression of cellular growth, wherein cellular death or suppression of growth indicates that the compound is effective.